

U.S. Environmental Protection Agency Office of Pesticide Programs Incident Data System

The U.S. Environmental Protection Agency (EPA) Office of Pesticide Programs (OPP) Incident Data System (IDS) is an electronic data base created in 1992 which tracks reports of adverse effects associated with exposure to pesticides (commonly referred to as pesticide incidents). EPA receives and tracks this information in two report formats: individual incident reports and aggregated summary reports. Almost all of the incident reports were received by EPA from 1992 onwards, though a small number precede that date. The full reports have been imaged and are stored as digital images since 2002 and on microfilm from 1992-2002. The database data is used to retrieve the full reports in image files. The following describes various aspects of the system.

What is the original source of the information?

The vast majority of incidents in the system are submitted by chemical company registrants as required by Section 6(a)(2) of the U.S. pesticide law, the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Other reports are submitted by private citizens, government agencies, either in writing or by telephone, as well as reports from the Internet. The IDS system includes individual incident reports with narrative, circumstances and symptoms. It also includes aggregate summaries, most often without narrative explanations. These are statistical summaries—like spreadsheet lines, product by product-- of certain types of more common and less severe categories of incidents. In 1998, guidance for U.S. pesticide registrants, published in 40 Code of Federal Regulations (CFR) 159.184, distinguished the type and severity of incidents, and determined that some should be reported as individual reports and others, generally less severe, should be aggregated.

IDS Nomenclature

Package number -- indicates the entire submission received from one source at one time. Often this is a compilation of many incidents, and the same package description then shows repeatedly on a listing for all separate incidents in the same submission.

Incident number -- within a package, an incident number indicates each separate incident report.

Aggregate summary sequence numbers -- indicate separate statistical summaries within a package. Each indicates incident exposure/severity counts for a single product in a time period.

Submission date -- the date EPA received the incident report.

Incident date -- For individual incidents, the incident date is the date on which adverse effects occurred or began. This may be different than the date on which the pesticide was applied in the incident. For aggregate summaries, a date range is provided which indicates the start and end of a time frame in which the reporting company received and accumulated reports. Normally, aggregate summaries are reported quarterly.

Country codes – identify the country where the incident occurred (source: OPPIN country vocabulary list). Some reports may show “ZZ,” meaning “unknown.” Many earlier reports may show no country code at all if no location was specified.

Report Status – “N” for new reports and “U” for updated reports. Updated reports relate to earlier reports of the same incident.

Submitter Type -- indicates whether the submitter is a registrant (R), nonregistrant government agency (N), private citizen (P), or other (O).

Registration number -- EPA registration number, composed of a company number followed by that company’s product number. If it is a distributor product, the registration number is followed by the distributor company number authorized to market the product under a different label.

Exposure severity codes – includes both the type of exposure and the level of severity of the effect reported in the incident. These levels are described in 40 [CFR 159.184](#) and explained further in PR Notice 98-3 and 98-4. Reports may describe adverse effects on humans, domestic animals, plant damage, wildlife, ONT (other non-target incidents, such as honeybees), water detects, or property damage. For a list of codes, see below.

Standard reports in Adobe Acrobat format include:

- ♦ Categories chosen for the search strategy appear at the top of the first page in Adobe Acrobat format (pdf) listings.
- ♦ The key for the exposure severity categories, which appears at the bottom of the standard reports in pdf listings.
- ♦ Totals are listed near the end of standard aggregate summary reports. All aggregate summary exposure/severity categories appear in columns subtitled by registration number (Product listing) or chemical name (Ingredient listing).

Understanding the reports & retrieval process

It is useful to remember that a single incident may involve multiple products each having multiple chemicals. On the Business Object reports (“Specified Ingredient” and “Specified Registration Number”) for individual reports, the extra products do not appear. On spreadsheets generated by use of IDS Query for the individual reports, extra products and chemicals do appear for the same report number if multiple products are involved in the same case.

If a standard aggregate summary printout for only certain categories is requested, such as domestic animals, the search will only retrieve aggregate summary rows which happen to have those desired categories. Those same rows may include other exposure type counts, but other categories not part of the search strategy are considered extraneous, and therefore numeric counts for extra categories are not reliable data. Numbers should only be compiled for the categories in the search strategy. If an aggregate summary search strategy covers ALL exposure severity types, the totals at the end of the aggregate summary listing are all reliable.

One other issue needs explanation: the “Total Incident” count column does not always add up to the sum total of counts on the same aggregate summary row. The reason is that one incident can sometimes involve multiple exposure types at different severity levels. One incident might have three effects: a human may be affected – perhaps at a minor level— and at the same time one dog is affected at a major level while another dog is affected at a moderate level. The total incident count is a count of occurrences, while the exposure severity counts relate to peak levels experienced by different organisms. See PR notice 98-3 for more explanation of aggregate summaries.

Exposure Type Codes	Explanation
C	Contamination (Used for soil contamination, product contamination)
D	Domestic Animal (used before severity categories were assigned)
DA	Domestic animal fatality (D-A)
DB	Major domestic animal incident (D-B)
DC	Moderate domestic animal incident (D-C)
DD	Minor domestic animal incident (D-D)
DE	Domestic animal incident - symptoms unknown or unexplained (D-E)
	The following 3 categories are used when drinking water is differentiated from surface water or groundwater
D1	Major drinking water incident
D2	Moderate drinking water incident
D3	Minor drinking water incident
E	Property damage (used before 1998 regulations; also where severity is unknown) The following 3 categories are used if severity can be determined:
EA	Major property damage (PD-A)
EB	Moderate property damage (PD-B)
EC	Minor property damage (PD-C)
F	Other (unusual cases not falling into other categories)
G	Groundwater (used before severity categories were assigned; also may include undetermined types of water detects potentially including surface or drinking water) This group of codes is used when the different types of groundwater are not differentiated. In these cases it may not be known if surface or drinking water is included:
GA	Major groundwater incident (G-A)
GB	Moderate groundwater incident (G-B)

GC	Minor groundwater incident (G-C)
	The following 3 codes are used when groundwater is differentiated specifically from drinking water or surface water:
G1	Major groundwater incidents
G2	Moderate groundwater incidents
G3	Minor groundwater incidents
H	Human (used before the new regulations went into effect)
HA	Human fatality (H-A)
HB	Human major incident (H-B)
HC	Human moderate incident (H-C)
HD	Human minor incident (H-D)
HE	Human incident - symptoms unknown or not specified (H-E)
ON	Other Nontarget (used for honeybee incidents since the new regulations; also shrimp, microbes, earthworms)
P	Plant damage (used for incidents before the new regulations)
PA	Plant damage- major incident (P-A)
PB	Plant damage -minor incident (P-B)
S	Surface water (used before new regulations) The following 3 codes are used if surface water is differentiated from groundwater or drinking water:
S1	Major surface water incident
S2	Moderate surface water incident
S3	Minor surface water incident
W	Wildlife (used before new regulations; included honeybees; now findable honeybee incidents have been reclassified as Other Nontarget incidents)
WA	Major wildlife incident (W-A)
WB	Minor wildlife incident (W-B)

Some registrants have refined the Exposure Type/Severity Category Codes listed in the regulations.

The following headings are used in aggregate summary report listings.

DWB	Moderate drinking water incident
DWC	Minor drinking water incident
GWB	Moderate groundwater incident
GWC	Minor groundwater incident
SWB	Moderate surface water incident
SWC	Minor surface water incident
PDB	Moderate property damage incident
PDC	Minor property damage incident

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